

WSDOT Ferries Division

Paula J. Hammond, P.E.
Secretary

Steve Reinmuth
Chief of Staff

David Moseley
WSDOT Assistant Secretary, Ferries Division

Senate Transportation Committee
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WSF Overview

- System overview
- Many things to many people
- Route characteristics
- Performance measures

System Overview

- More than 22 million riders per year
- 10 million vehicles carried per year
- Fleet of 23 auto-passenger ferries, 34-cars to 202-cars
- 20 terminals on 10 routes
- 450 departures per day
- 1800 employees
- Nine unions and 11 collective bargaining agreements



Many Things To Many People

- Marine highway
- Transit agency
- Link in region's multimodal connections
- Mover of freight and goods
- Tourist attraction

















Route Characteristics

Route	Commuter	Tourist	Island link	Commercial
Anacortes/Sidney		✓		
Anacortes/San Juan Islands		✓	✓	✓
Port Townsend/Coupeville		✓	✓	✓
Mukilteo/Clinton	✓	✓	✓	✓
Edmonds/Kingston	✓	✓		✓
Seattle/Bainbridge Island	✓	✓		
Seattle/Bremerton	✓	✓		
Fauntleroy/Vashon/Southworth	✓		✓	✓
Point Defiance/Tahlequah	✓		✓	

Performance Measures Report FY12

- Established by Legislature to ensure transparency and accountability
- Essential tool to evaluate WSF
- WSF met or exceeded 15 of the 17 measures

Performance Measures

Policy goal*/Performance measure		Prior (FY2011)**	Current (FY2012)**	Goal	Goal met	Comments
Maintenance and Capital Program Effectiveness						
1	Percent of terminal projects completed on time . • Terminal preservation projects • Terminal improvement projects	90% 100%	100% 100%	90% 90%		Exceeds on-time goal for FY2012.
2	Percent of terminal projects completed on budget . • Vessel preservation projects • Vessel improvement projects	100% 90%	100% 100%	90% 90%		Exceeds on-budget goal for FY2012.
3	Percent of vessel capital projects completed on time . • New construction projects • Vessel preservation projects • Vessel improvement projects	100% 100% 100%	100% 100% 100%	100% 75% 75%	  	Exceeds on-time goals for vessel construction, preservation and improvement projects for FY2012. Met on-time goal for vessel new construction projects for FY2012
4	Percent of vessel capital projects completed on budget . • New construction projects ¹ • Vessel preservation projects • Vessel improvement projects	100% 70% 80%	100% 78% 75%	100% 75% 75%	  	Exceeds on-budget goal for vessel preservation projects for FY2012. Met on-budget goal for vessel new construction and improvement projects for FY2012.
14	Preliminary engineering costs. • As a percent of terminal capital project costs • As a percent of existing vessel capital project ¹ costs • As a percent new vessel project costs	22% 7% ⁷ 2.5%	25% ² 17% ³ 2.8%	19% ^{4,6} 17% ⁴ 10% ⁴	  	Terminal capital projects were below goals while both existing and new vessel projects exceeded goals for engineering costs.
15	Average vessel out of service time.	8 weeks	7.8 weeks	8 ⁶ weeks		Marks improvement on last period and is better than the out of service time goal.
Safety Performance						
5	Passenger injuries per million passenger miles below three-year moving average.	0.087 ⁷	0.092	Less than 0.086 ⁸		The number of passenger injuries was above the three-year moving average.
6	OSHA recordable crew injuries per 10,000 revenue service hours.	9.7	5.9	9.3 ⁸		Surpasses goal by having less OSHA -recordable crew injuries.

Performance Measures

Policy goal*/Performance measure		Prior (FY2011)**	Current (FY2012)**	Goal	Goal met	Comments
Service Effectiveness						
7	Passenger satisfaction with WSF Staff customer service .	86%	95%	90%	✓	Exceeds passenger satisfaction for customer service goal.
8	Passenger satisfaction with cleanliness and comfort of WSF terminals, facilities, and vessels.	85%	90%	90%	✓	Meets customer satisfaction for cleanliness and comfort goal.
9	Passenger satisfaction with service requests made via telephone or WSF website.	76%	89%	90%	—	Was one percent below goal for passenger satisfaction with service requests.
17	Service reliability level (percent of scheduled trips completed).	99.5%	99.6%	99%	✓	Meets service reliability level goal.
16	On-time performance level (percent of trips departing at scheduled time).	94.4%	96.1%	95%	✓	Exceeds on-time performance level goal.
Cost Containment Measures						
10	Annual operating cost estimate per passenger mile compared to budgeted cost.	0.05%	-1.86%	Within 5% of budget	✓	Exceeds goal for annual operating cost per passenger mile.
11	Annual operating cost estimate per revenue service mile compared to budgeted cost.	-1.1% ⁷	-2.0% ⁷	Within 5% of budget	✓	Surpasses goal for annual operating cost per revenue service mile.
12	Overtime hours as a percentage of straight time hours compared to budgeted overtime hours.	-1.07%	+0.38%	Within 1% of budget	✓	Exceeds goal for annual overtime as a percentage of straight time.
13	Gallons of fuel consumed per revenue service mile compared to budgeted fuel consumption.	-0.5% ⁷	-0.7%	Within 5% of budget	✓	Exceeds goal for fuel consumption per revenue service mile.

WSF Budget Requests

- 2013-15 budget
- 10-year capital program
- New COI requirements
- Additional maintenance costs
- Ferry labor agreements
- Olympic Class costs

WSF 2013-15 Budget

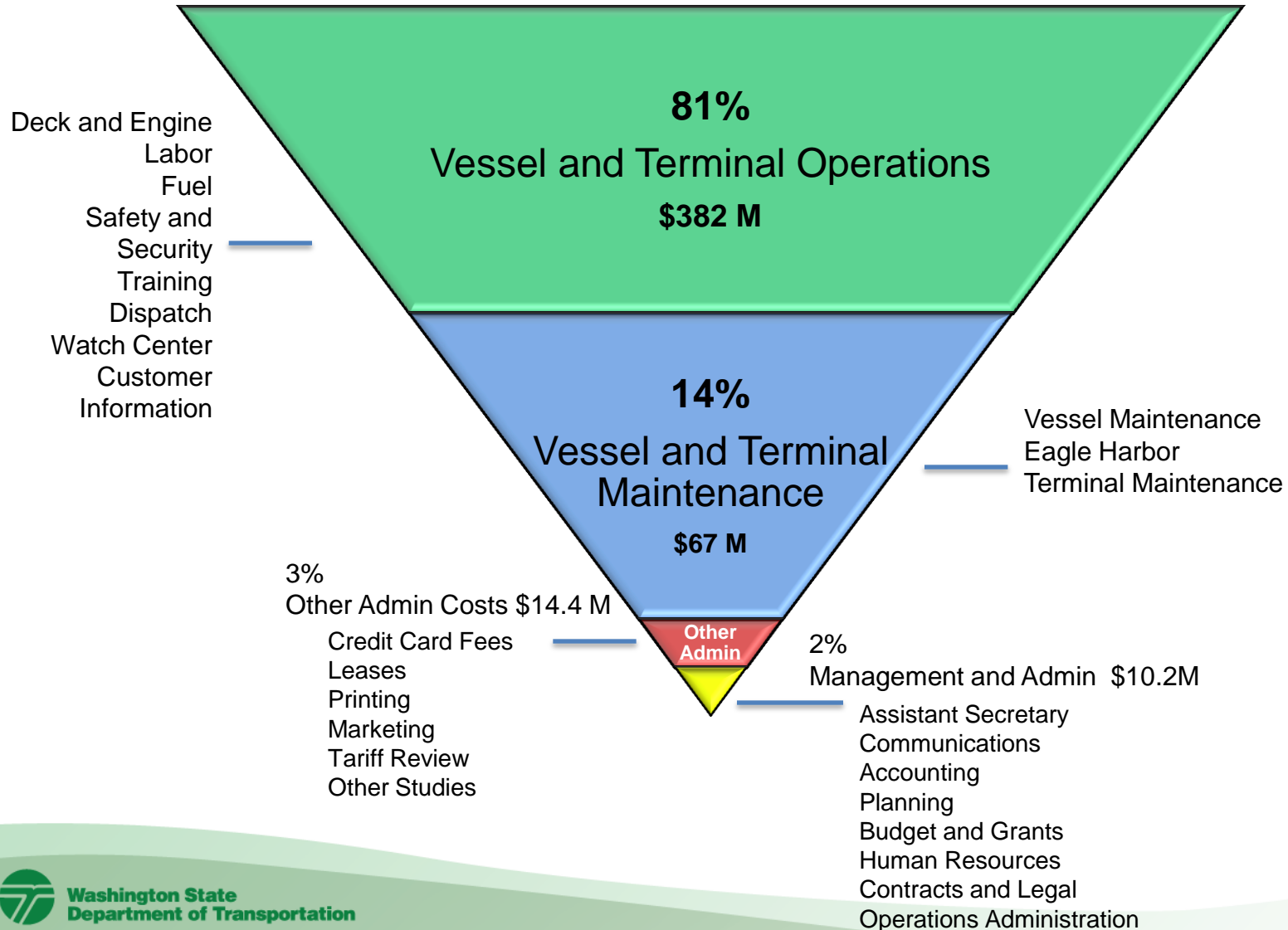
Operating \$476 million

Capital \$250 million

Total \$726 million

Planned cash transfer of \$120 million to ferries from other transportation accounts during 2013-2015 biennium.

WSF 2013-15 Operating Budget - \$476 M



10-Year Capital Program

Total program 2013-2023	\$1.5 billion
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“Bare bones” capital program	\$1.1 billion
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Proposed capital program defers projects that were slated for this 10-year time frame:

Vessels: Deferred capital preservation includes some piping systems, topside painting, passenger space renovations and elevators.

Terminals: Deferred capital preservation includes some timber trestles and dolphins, terminal building updates and overhead loading improvements.

New COI requirements

- U.S. Coast Guard (USCG) issues certificate of inspection (COI) for each vessel
- COI dictates vessel crew size
- USCG has recently issued new COIs for some vessels
- New COIs have increased vessel staffing levels
- Increased vessel staffing levels means it costs more to operate the system

New COI requirements (2013-15 Biennium)

Super Class Ferries (Deck Crewing)	\$3.9 M
Super Class Ferries (Engine Room Crewing)	\$3.7 M
Issaquah Class Ferries (including M/V Sealth)	\$4.6 M
Evergreen State Class Ferries	\$1.1 M
Jumbo Class Ferries	\$0.8 M
Training (staff and ongoing training for new crew)	\$0.3 M
TOTAL COST FOR NEW COI REQUIREMENTS ABOVE 2011-2013 BIENNIUM BUDGET	\$14.4 M

Additional Maintenance Costs

- Vessel maintenance budget is challenged by:
 - (1) Shortage of nearby shipyard dry dock space availability
 - (2) Emergency repair budget was reduced and does not cover all expenses following an event in returning the vessel to service
- Deferred vessel preservation due to budget constraints requires increased maintenance to keep the vessels operational



Olympic Class Costs

- WSF has a total budget of \$279.4M to build two Olympic Class 144-car ferries.
- A third ferry would cost \$123 million
- A fourth ferry would cost \$127 million
- Three new ferries are needed to replace the 1950s-era Evergreen State Class vessels



Ferry Labor Agreements 2013-2015

Cost of Labor Arbitration Awards and Settlements

Arbitration Awards

IBU (Inlandboatmen's Union of the Pacific)	\$4.2 M
Marine Engineers' Beneficial Association	\$1.8 M
MM&P (Masters, Mates and Pilots)	\$0.8 M
Metal Trades Union	\$0.2 M
MM&P Operations Watch Supervisors	\$0.2 M
Total– Arbitration Awards	\$7.2 M

Negotiated Contracts

FASPAA (Ferry Agents, Supervisors, and Project Administrators Association)	\$0.1 M
Carpenters (previously part of Metal Trades)	\$0.1 M
OPEIU (Office and Professional Employees International Union) and SEIU (Service Employees International Union)	\$0.1 M
Total– Negotiated Contracts	\$0.3 M

TOTAL	\$7.5 M
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WSF Initiatives

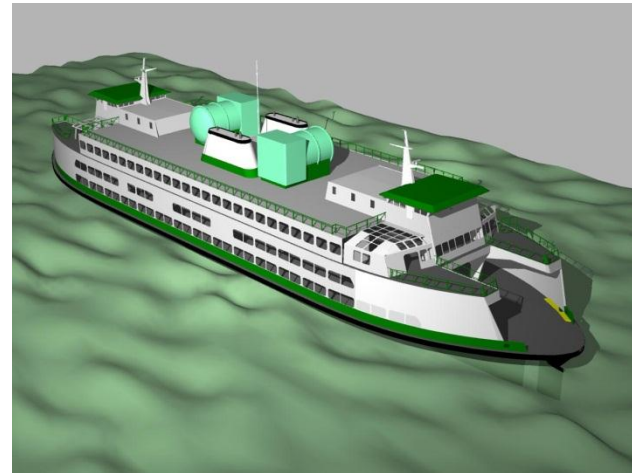
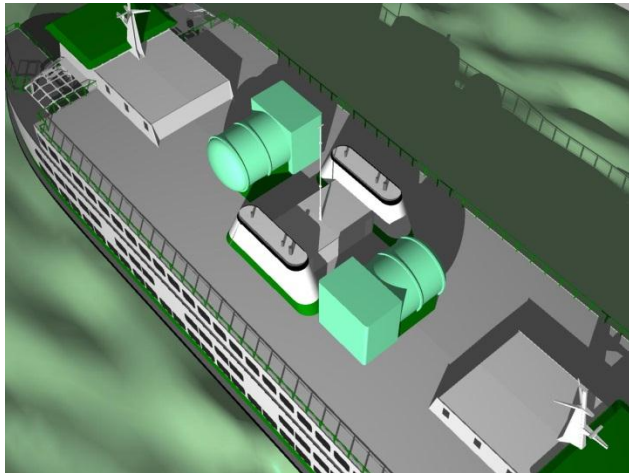
- Liquefied natural gas
- *Hyak* hybrid pilot project
- Fuel hedging
- Vehicle reservations system
- Visual paging

Liquefied Natural Gas

- Completed technical feasibility and cost/benefit analysis with Glosten Associates June 3, 2011
- Submitted conceptual design to USCG Sept. 13, 2011
- USCG approved conceptual design Dec. 19, 2011
- DNV conducting risk analysis and safety & security assessment
- Issued RFP for retrofit of six Issaquah class vessels
 - Proposals due March 5
 - Evaluate proposals and select contractor
- Moving forward
 - Complete plans and obtain USCG approval
 - Obtain USCG approval of final design
 - Perform conversions

Liquefied Natural Gas

- LNG reduces fuel costs and decreases emissions
- WSF has received conceptual approval from the U.S. Coast Guard to retrofit the propulsion system with new engines on the six Issaquah Class ferries to use LNG as a source of fuel.
- Estimated cost of conversion for all six vessels: \$84.5 M



Liquefied Natural Gas

Milestones for the WSF LNG Safety and Security Assessment and Operational Planning

- Jan. 8: Project kickoff meeting with DNV
- Jan. 8-9: Risk assessment familiarization tours with DNV
- Feb. 13-15: Safety, security, navigational and environmental risk assessment workshops with key stakeholders
- Feb. 26: In-depth security risk assessment follow-up with USCG Sector Puget Sound
- Mid-March:
 - Draft findings of the safety, security, navigational and environmental risk assessment workshops due
 - Detailed modeling of LNG spill and vapor dispersion due
 - Modeling of collision and damage stability due
- Mid-April:
 - First draft of the complete safety, security, navigational and environmental risk assessments due
 - First draft of LNG operations and risk mitigation plans due
- End of April: Formal presentation of completed safety, security, navigational and environmental risk assessments, and LNG operations and risk mitigation plans to USCG Sector Puget Sound due
- Mid-May: After input from USCG Sector Puget Sound from the presentation, finalize the safety, security, navigational and environmental risk assessments, and LNG operations and risk mitigation plans

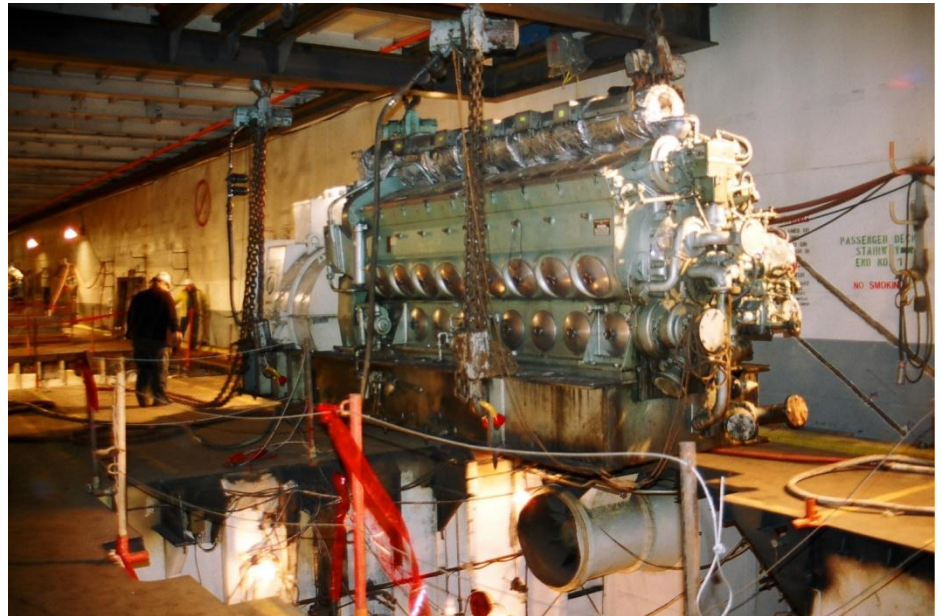
Liquefied Natural Gas

Overall Financial Benefits

Project Element (dollars in millions)	Discounted Values (3% Discount Rate)
Six Issaquah Class Vessels NPV Fuel Savings for 23-25 years	\$112.1
Social Benefits of Carbon reduction	\$5.3
Social Benefits of particulate matter reduction	\$61.3
Social Benefits of NOx reduction	\$21.7
Total Benefits	\$200.5
Design	\$0.3
Shipyard Contract and Integrator	\$36.5
Construction Engineering	\$0.9
Owner Furnished Equipment	\$34.6
Risk and Escalation	\$8.9
Total Costs	\$81.2
Benefit Cost Ratio	2.47
NPV, fuel + emission benefits	119.2
NPV, fuel benefits only	\$30.9
ROI, fuel + emission benefits	8.5 years
ROI, fuel only	14 years
Average Annual fuel savings pervessel	\$1.1 million

Hyak Hybrid Pilot Project

- Propulsion engines on *Hyak*
- Power management
- Fuel savings
- Next steps



Next Steps For Pilot Project

Timeline (subject to change)

- Feb. 11, 2013: RFP issued
- April 12, 2013: Proposals due
- May 24, 2013: Award contract
- Sept. 1, 2015: Project completed

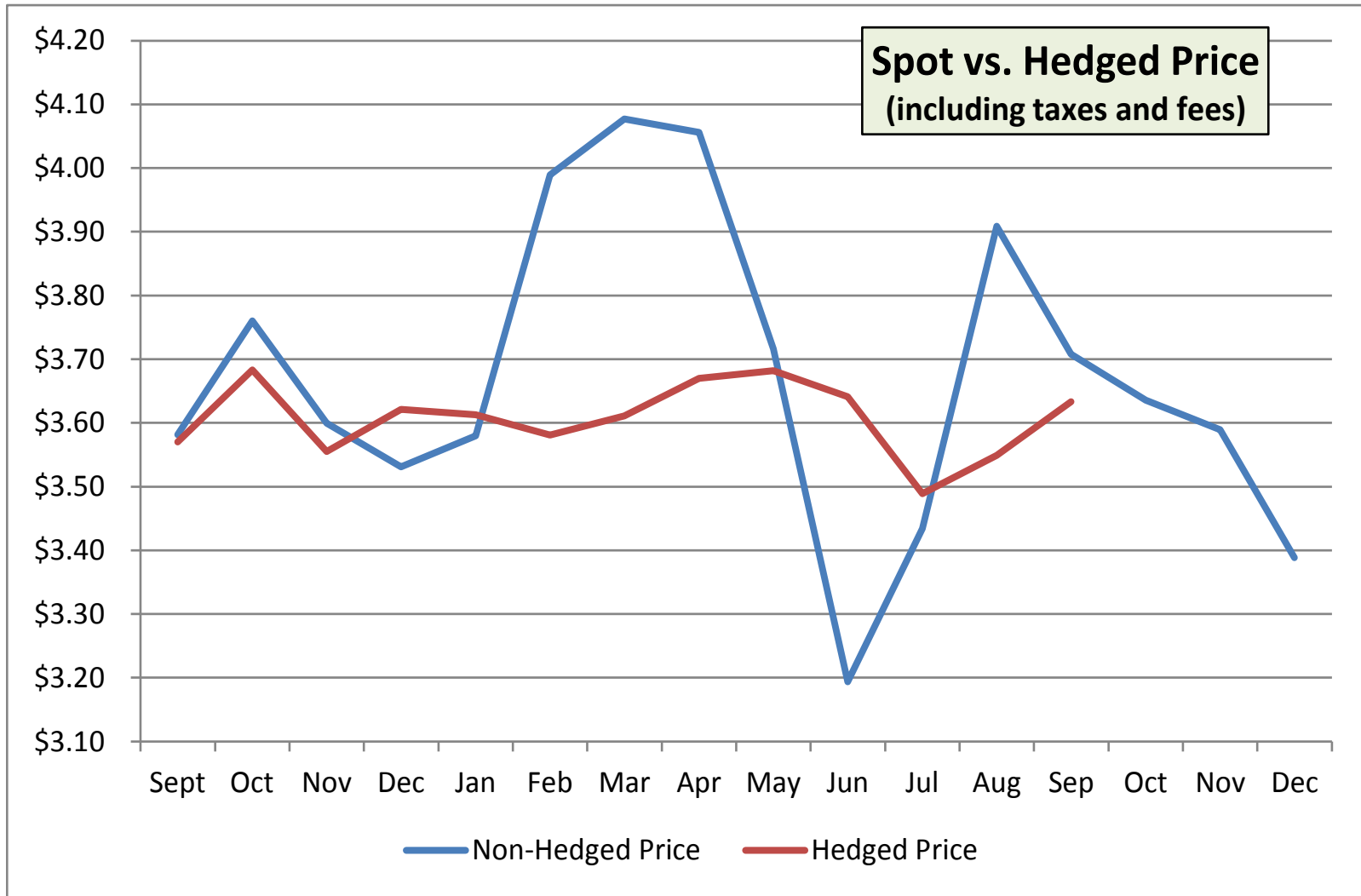
Cost estimate: \$22.8M

- Grant funds: \$15.1M

Fuel Hedging

- Overview
- Hedging stabilizes prices
- Policy elements
- FY11-13 hedging saved money

Hedging Stabilizes Prices



Vehicle Reservations System

Phase 1 (\$4.972M)

- Deployed June 2012 for Port Townsend/ Coupeville, Anacortes/Sidney, and commercial vehicles on Anacortes/San Juan Islands routes.
- Final completion expected this fiscal year on time and on budget.

Phase 2 (\$4.211M)

- Planned deployment for all vehicles on the Anacortes/San Juan Islands routes is late 2014.
- Developed San Juan Islands Partnership to allow input on business policies impacting their route; meet every 6-8 weeks.
- Refining scope and beginning design through June 2013 with development/construction beginning July 2013.

Vehicle Reservations System

Reservation Statistics

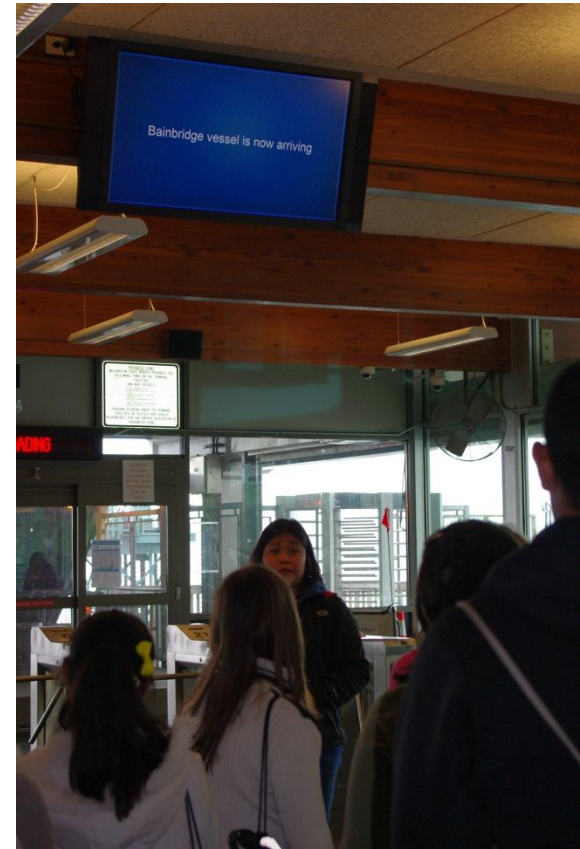
- Over 150,000 reservations made June 2012 to January 2013
- Port Townsend/Coupeville route: previous system show ratio of 60% has increased to 86% due to required deposit
- 85% of customers are making their reservations online

Fall Survey Results

- 85% found the website easy to use
- 92% found the check-in experience as good or excellent
- Improving website usability is the #1 suggestion. Website enhancements planned for mid-March.

Visual Paging System

- Allows hard-of-hearing or deaf customers to access critical traveler information by way of video screens
- Pilot success has led to system build out
- Tool to grow revenue and promote destination marketing



Questions?

For more information about the WSDOT Ferries Division,
please contact:

David Moseley

Assistant Secretary, WSDOT Ferries Division

(206) 515-3401 or MoseleD@wsdot.wa.gov